Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method to obtain clear reception of a signal with phase errors, comprising:

receiving a waveform sent from an analog transmitter;

estimating a phase error present in said waveform; and

compensating for said phase error; wherein said phase error is estimated via a minimum to maximum envelope ratio technique, wherein said minimum to maximum envelope technique comprises:

determining a minimum envelope value of said waveform;

determining a maximum envelope value of said waveform;

calculating a ratio of the minimum envelope value to the maximum envelope value; and

converting said ratio to a phase error estimate utilizing a curve fitting technique.

2. (Canceled)

3. (Currently Amended) The method as claimed in claim 1 [[2]], wherein said curve fitting technique is at least one of a straight line fit and quadratic equation.

4. (Currently Amended) The method as claimed in claim 1 [[2]], wherein said curve fitting technique is accomplished using a look-up table.

5. (Currently Amended) The method as claimed in claim 1 [[2]], wherein said phase error estimate is computed without quadrature components.

6. (Currently Amended) A method to obtain clear reception of a signal with phase errors, comprising:

receiving a waveform;

estimating a phase error present in said waveform; and

compensating for said phase error, ~~The method as claimed in claim 1,~~ wherein said phase error estimate is estimated via a maximum abscissa technique, said maximum abscissa technique comprising:

determining a maximum abscissa value of said waveform,

finding an index of said maximum abscissa value; and

calculating a phase error estimate utilizing an arctangent of an angle formed by a line from an origin through a point on said waveform at said index, said angle being equal to said phase error estimate.

7. (Original) The method as claimed in claim 6, further including performing multiple iterations of said maximum abscissa technique to thereby reduce distortion.

8. (Original) The method as claimed in claim 6, wherein data produced utilizing said maximum abscissa technique is fit into a quadratic equation suitable for creating a more accurate phase error estimate.

9. (Currently Amended) A method to obtain clear reception of a signal with phase errors, comprising:

receiving a waveform;

estimating a phase error present in said waveform; and

compensating for said phase error, ~~The method as claimed in claim 1,~~ wherein said phase error estimate is estimated via a half angle technique, said half angle technique comprising:

calculating an envelope of said waveform;

computing an envelope error;

finding indices of intersection;

interpolating an abscissa and an ordinate; and

determining an angle subtended by a line from an origin to an intersection and the closest axis, wherein a phase error estimate is twice said angle.

10. (Original) The method as claimed in clam 9, wherein said half angle technique produces an accurate phase error estimate with direct current offset in a quadrature channel.

11. (Canceled)

12. (Previously Presented) A method for estimating phase errors present in a signal, comprising:

receiving a waveform sent from an analog transmitter; and

estimating a phase error present in said waveform using a minimum to maximum envelope ratio technique, said minimum to maximum envelope technique comprises:

determining a minimum envelope value of said waveform;

determining a maximum envelope value of said waveform;

calculating a ratio of the minimum envelope value to the maximum envelope value; and

converting said ratio to a phase error estimate utilizing a curve fitting technique.

13. (Canceled)

14. (Previously Presented) The method as claimed in claim 12 wherein said curve fitting technique is at least one of a straight line fit and quadratic equation.

15. (Previously Presented) The method as claimed in claim 12 wherein said phase error estimate is computed without quadrature components.

16. (Currently Amended) A method for estimating phase errors present in a signal, comprising:

receiving a waveform; and

estimating a phase error present in said waveform, ~~The method as claimed in claim 12,~~ wherein said phase error estimate is estimated via a maximum abscissa technique, said maximum abscissa technique comprising:

determining a maximum abscissa value of said waveform;

finding an index of said maximum abscissa value; and

calculating a phase error estimate utilizing an arctangent of an angle formed by a line from an origin through a point on said waveform at said index, said angle being equal to said phase error estimate.

17. (Original) The method as claimed in claim 16, further including performing multiple iterations of said maximum abscissa technique to thereby reduce distortion.

18. (Original) The method as claimed in claim 16, wherein data produced utilizing said maximum abscissa technique is fit into a quadratic equation suitable for creating a more accurate phase error estimate.

19. (Currently Amended) A method for estimating phase errors present in a signal, comprising:

receiving a waveform; and

estimating a phase error present in said waveform, ~~The method as claimed in claim 12,~~ wherein said phase error estimate is estimated via a half angle technique, said half angle technique comprising:

calculating an envelope of said waveform;

computing an envelope error;

finding indices of intersection;

interpolating an abscissa and an ordinate; and

determining an angle subtended by a line from an origin to an intersection and the closest axis, wherein a phase error estimate is twice said angle.

20. (Original) The method as claimed in claim 19, wherein said half angle technique produces an accurate phase error estimate with direct current offset in a quadrature channel.